

Translation of PCT/EP2004/005728**New claims**

5 1. High-frequency measuring system for measuring a device under test (19), comprising a measuring-device unit (2) and at least one high-frequency module (3, 24, 25), wherein each high-frequency module (3, 24, 25) can be placed spatially
10 separately from the measuring-device unit (2) and each high-frequency module (3, 24, 25) can be connected to the measuring-device unit (2) via a digital interface (23, 26, 27),
characterised in that
15 the processing of input data to form a bitstream to be transmitted via the digital interface (26) takes place by assigning the symbols to states in the state diagram of the I-Q (in phase - quadrature phase) level in the measuring-device unit (2),
20 and/or that a digitised intermediate-frequency signal is transmitted via the digital interface (27).

2. High-frequency measuring system according to claim
25 1,
characterised in that
the high-frequency module (3, 24, 25) comprises a transmitter device and/or a receiver device (28, 29) for communication with a device under test
30 (19).

3. High-frequency measuring system according to claim 1 or 2,
characterised in that

the digital interface (23, 26, 27) is a serial interface.

4. High-frequency measuring system according to claim
5 1 or 2,
characterised in that
the digital interface (23, 26, 27) is a parallel interface.

10 5. High-frequency measuring system according to any one of claims 1 to 4,
characterised in that
the digital interface (23, 26, 27) is an optical interface.

15 6. High-frequency measuring system according to any one of claims 1 to 4,
characterised in that
the digital interface (23, 26, 27) is an electrical interface.

20 7. High-frequency measuring system according to any one of claims 1 to 6,
characterised in that
the at least one high-frequency module (3, 24, 25) is supplied with electrical energy via a power-supply unit (14, 40) independent from the measuring-device unit (2).

25 8. High-frequency measuring system according to any one of claims 1 to 7,
characterised in that

several identical ports (5.1, 5.2, 5.3) are provided on the measuring-device unit (2) for the digital interface (23).

5 9. High-frequency measuring system according to any one of claims 1 to 8,
characterised in that
several different ports (5.1, 5.2, 5.3, 6.1, 6.2, 6.3) are provided on the measuring-device unit for
10 the digital interface (23).

10. High-frequency measuring system according to any one of claims 1 to 9,
characterised in that
control data and/or user data can be transmitted in a standardised form via the digital interface and that the at least one high-frequency module (24') comprises means for processing a high-frequency signal with regard to the transmission of data in standardised form via the digital interface and/or for processing the data transmitted in standardised form with regard to at least one given transmission standard for the high-frequency signal.
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